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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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DILLON & YUDELL LLP
8911 N. CAPITAL OF TEXAS HWY.,
SUITE 2110
AUSTIN, TX 78759

EXAMINER	
NGUYEN, CINDY	
ART UNIT	**PAPER NUMBER**
2161	

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/840,421	HEKMATPOUR, AMIR	
	Examiner	Art Unit	
	Cindy Nguyen	2171	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 June 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21 and 23-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21, 23-36* is/are rejected.

7)☒ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 April 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This is in response to amendment filed 06/01/04.

1. Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-14 and 20-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robertson et al. (US 6594799) (Robertson) in view of Dole (US 6634008).

Regarding claims 1 and 28, Robertson discloses: A computer-based design framework for and a computer program product for use by dispersed designed teams that required access to and interaction with each other, said framework comprising:

a virtual database management system (204, fig. 2, Robertson), which receives data from a plurality of distinct source that are involved in the collaborative design of a product and creates a single database interface to said sources (col. 8, lines 16-35, Robertson);

additional logic associated with said virtual database management system that provides a set of publishing rules for extracting information on demand and publishing said extracted information in a format recognized by a requestor of said information (col. 9, lines 57-67, Robertson).

However, Robertson didn't disclose: software code associated with said virtual database management system for mapping various informational structures utilized by said sources to a

common syntax. On the other hand, Dole discloses: software code associated with said virtual database management system for mapping various informational structures utilized by said sources to a common syntax (col. 16, lines 49-55, Dole). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include software code associated with said virtual database management system for mapping various informational structures utilized by said sources to a common syntax in the system of Robertson as taught by Dole. The motivation being to provide the method using XML, the designer captures a design methodology in a single file in the form of XML script.

In addition, Robertson/Dole discloses: a computer readable medium (col. 21, lines 3, Robertson); and program code on said computer readable medium for enabling collaborative design of a product (232, 234, fig. 2, Roberson).

Regarding claim 2, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Robertson/Dole discloses: wherein: each of said distinct sources represents a design team with one or more design team members provided access to said virtual database management system via a network (230, fig. 2 and col. 15, lines 2-20, Robertson); and said common syntax is an eXtensible Markup Language (XML) (col. 16, lines 20-30, Dole).

Regarding claim 3, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Robertson/Dole discloses: further comprising program code for providing platform-independent application and services exchange utilizing XML wrapped data, service, and application that is delivered to a client (col. 27, lines 34-48, Robertson).

As per claim 4, all the limitations of this claim have been noted in the rejection of claims 1 and 2 above. It is therefore rejected as set forth above. In addition, Robertson/Dole discloses:

wherein said product is a system on a chip (SOC) and said XML is expanded with SOC specific attribute type definitions to generate a SOC markup language (SOCML) that support plurality of functional components that operate according to SOCML design specification (col. 16, lines 20-39, Dole).

Regarding claim 5, all the limitations of this claim have been noted in the rejection of claim 4 above. In addition, Robertson/Dole discloses: wherein each SOCML function is coded utilizing design and analysis java applications (multiple language) that are translated into XML, wherein said XML acts as a platform independent wrapper for said SOCML functions (col. 16, liens 66-67, Dole).

Regarding claim 6, all the limitations of this claim have been noted in the rejection of claim 5 above. In addition, Robertson/Dole discloses: wherein each of said design teams operated on a particular sub-component of the design of said product including system design, application development, and manufacturing (col. 4, lines 48-63, Dole).

Regarding claim 7, all the limitations of this claim have been noted in the rejection of claim 6 above. In addition, Robertson/Dole discloses: wherein said publishing rules includes transformation rules based on extensible style sheet language (XSL) (different formats) (col. 16, liens 31-39, Dole), said framework further comprising program code for providing a design team member and other personnel with output from said design process via XSL style sheets and XSLT transformers, which manipulate data from said SOCML database (col. 16, lines 49-55, Dole).

Regarding claim 8, all the limitations of this claim have been noted in the rejection of claim 7 above. In addition, Robertson/Dole discloses: further comprising program code for

exporting design information to industry standard IC design computer aided design tools (col. 9, lines 60-67, Dole).

Regarding claim 9, all the limitations of this claim have been noted in the rejection of claim 3 above. In addition, Robertson/Dole discloses: wherein said program code for providing platform independent application and services exchange includes a universal description discovery and integration director for locating services and exchange data and service according to simple object access protocol (col. 27, lines 34-48, Robertson).

Regarding claim 10, all the limitations of this claim have been noted in the rejection of claim 9 above. In addition, Robertson/Dole discloses: wherein said network is a local area network and connection to said framework by each of said design team members is provided via a LAN connected terminal (col. 7, lines 58-61, Robertson).

Regarding claim 11, all the limitations of this claim have been noted in the rejection of claim 9 above. In addition, Robertson/Dole discloses: wherein said network is the internet (230, fig. 2, Robertson); said virtual database management system is hosted on a server on the Internet (260, fig. 2, Robertson); and wherein access to said design framework is provided via a web browser of a computer system that is connected to the Internet and is utilized by said design team members (224, fig. 2, Robertson).

Regarding claim 12, all the limitations of this claim have been noted in the rejection of claim 11 above. In addition, Robertson/Dole discloses: further comprising an Access-Privilege-manager implemented with program code that monitors and controls access to said design framework by design teams, design team members, and other selected personnel groups, and design automation tools (col. 15, line 2-20, Robertson).

Regarding claim 13, all the limitations of this claim have been noted in the rejection of claim 12 above. In addition, Robertson/Dole discloses: wherein said access privilege manager maintains a control list of one or more authorization parameters from among users, user identification and passwords, a level of authorization for each user and group a group to which each user belongs, specific group authority for access, and access authorization for one or more project administrator, (col.. 13, lines 17 to col. 14, lines 5 and col. 15, liens 2-20, Robertson).

Regarding claim 14, all the limitations of this claim have been noted in the rejection of claim 13 above. In addition, Robertson/Dole discloses: wherein access to processes and designs within said framework is only granted to a user whose authorization and registered role supports said access (col. 14, lines 14-20, Robertson).

Regarding claim 20, all the limitations of this claim have been noted in the rejection of claim 4. It is therefore rejected as set forth above Robertson/Dole discloses: establishing a network-accessible design framework that enables remote access to individual members or groups of a design team (col. 15, lines 2-20, Robertson); normalizing a set of tools within said design framework for utilization by each of said individual members or groups, wherein said tools are available via said network (col. 13, lines 45-57, Robertson); providing secured access to said design framework by said individual members and groups from a terminal connected to said network (col. 15, lines 2-20, Robertson); providing, via said design framework and said terminals, real-time collaborative design of said product design with platform-independent application and service exchange utilizing eXtensible Markup Language (XML) wrapped data, service and applications (col. 27, lines 34-48, Robertson).

Regarding claim 21, all the limitations of this claim have been noted in the rejection of claim 20 above. In addition, Robertson/Dole discloses: wherein said normalizing step includes: providing the automated exchange of design data via XML functionality, wherein a set of rules defining XML tags are utilized to define a structure, format, and content of design data components that are exchanged (col. 16, lines 56-67, Dole); providing processing and searching of data utilizing XML-based search tools that use data structure and meta data (col. 16, lines 20-30, Dole); and enabling both local and remote processing of said data (fig. 2, Robertson).

Regarding claim 23, all the limitations of this claim have been noted in the rejection of claim 20 above. In addition, Robertson/Dole discloses: wherein said enabling comprises: defining elements that may exist in a SOCML document utilizing document type definition (DTD) (col. 16, lines 32-39, Dole); setting corresponding attributes of said elements nesting of said elements, and the other of which said elements are defined in SOCML (col. 16, lines 15-20, Dole); selecting which XML design files adhering to SOC document type definitions constitute SOCML (col. 16, liens 20-30, Dole).

Regarding claim 24, all the limitations of this claim have been noted in the rejection of claim 20 above. In addition, Robertson/Dole discloses: further comprising: receiving architectural, functional, and performance specification in hardware description language (HDL) (col. 11, lines 62-65, Dole); synthesizing said specification (col. 12, lines 25-35, Dole); performing optimization and verification of said HDL (col. 12, lines 58-67, Dole); enabling passive collaboration during optimization and verification step utilizing loosely integrated

knowledge based design optimization based on input provided by an end user and a manufacturing design team (col. 13, lines 10-20, Dole).

Regarding claim 25, all the limitations of this claim have been noted in the rejection of claim 20 above. In addition, Robertson/Dole discloses: wherein said providing step comprises providing said secured access to said design framework via a LAN that includes a database of user parameters including login identification, password, level of security, and types of access (col. 15, lines 2-20, Robertson).

Regarding claim 26, all the limitations of this claim have been noted in the rejection of claim 20 above. In addition, Robertson/Dole discloses: wherein said design framework is a set of program code stored on a server on the internet, said providing step further comprising accessing said design framework via a web browser on a computer system connected to the Internet (224, 230, fig. 2, Robertson).

Regarding claim 27, all the limitations of this claim have been noted in the rejection of claim 26 above. In addition, Robertson/Dole discloses: creating a database of user access parameters, including user identification, password, level of access permissions, group access permission, and tasks to which a user has access (col. 15, lines 2-20, Robertson); monitoring each request for access to said framework (col. 15, lines 28-37, Robertson); providing access to said framework only when a requester correctly enters required user access parameters, wherein said requestor is only provided access to areas of said design framework corresponding to those areas specified in a user profile associated with said user access parameters (col. 15, lines 2-20, Robertson).

Regarding claims 29 and 36, all the limitations of this claim have been noted in the rejection of claim 18 and 4 above, respectively. In addition, Robertson/Dole discloses: wherein said function components include a SOCML database (col. 16, lines 56-61, Dole), a SOCML simulator (col. 12, lines 37-47, Dole), a SOCML synthesis (col. 12, lines 25-35, Dole) and timing analysis component (col. 12, lines 59-64, Dole), and a SOCML database exchange manager (col. 19, lines 2-16, Robertson).

3. Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robertson et al. (US 6594799) (Robertson) in view of Dole (US 6634008 and further in view of Dragulev et al. (US 20010037407).

Regarding claim 15, all the limitations of this claim have been noted in the rejection of claim 14 above. However, Robertson/Dole didn't disclose: wherein said access-privilege-manager supports biometric security features for user access to said framework. On the other hand, Dragulev discloses: wherein said access-privilege-manager supports biometric security features for user access to said framework (page 2, 0029, Dragulev). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include biometric security features for user access to said framework in the combination system of Robertson/Dole as taught by Dragulev. The motivation being to protect network servers and users from hacker attacks.

Regarding claim 16, all the limitations of this claim have been noted in the rejection of claim 15 above. In addition, Robertson/Dole discloses: further comprising a customer help at

terminal (CHATSOC) function that provides an online collaboration and conferencing between design teams, design team members, and other personnel (col. 9, lines 5-13, Robertson).

Regarding claim 17, all the limitations of this claim have been noted in the rejection of claim 16 above. In addition, Robertson/Dole discloses: wherein CHATSOC further provides outside assistance to a design team and design team member, wherein said outside assistance is selected from a compiled database of outside assistance personnel in response to a request for assistance by said design team or design team member, wherein a peer to peer connection is dynamically established when an outside assistance personnel accepts and acknowledges the request (col. 9, lines 4-13, Robertson).

Regarding claim 18, all the limitations of this claim have been noted in the rejection of claim 17 above. In addition, Robertson/Dole discloses: wherein each design team may be provides local ownership of a particular task within the design teams, wherein said local ownership allows for a determination of a level of corporation with other design teams and a level of information sharing desired (col. 24, lines 16-34, Dole).

Regarding claim 19, all the limitations of this claim have been noted in the rejection of claim 18 above. In addition, Robertson/Dole discloses: wherein said design is divided into a plurality of tasks (col. 24, line 31, Dole), and said framework further includes program code for tracking each of said plurality of tasks and tools available within a design environment (col. 24, liens 26-30, Dole); matching tasks to specific tools, wherein processing intensive tasks are assigned to fastest processors and application available in said design environment (col. 6, liens 49-58, Robertson); matching task to a team and team members with a required expertise (col. 6, lines 59-65, Robertson).

Response to Arguments (filed 06/0104)

Applicant's arguments have been considered, but are moot in view of the new ground(s) of rejection.

1. Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 703-305-4698. The examiner can normally be reached on M-F: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Cindy Nguyen
November 9, 2004

SAFET METJAHIC
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100